

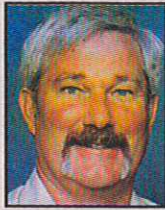
Sometimes an installation is in the bottom line

Putting solar on your home or business, there is a lot to consider. Some of these considerations are cost and pay-back. Typical cost is \$8 to \$11 per watt. To qualify this, it is cheaper to install a larger system than a smaller one.

It is not wise to install anything smaller than 1000 watts. Installing an array that uses the full capacity of the inverter, on a roof with shingles and no steeper than a 5/12 pitch.

Net-metering inverters are current limiting, which means they will not output more than the rating. The reason for the need of larger arrays is to compensate for mismatching of panels, heat, and line loss in the wiring.

There are also tax incentives available that offsets the cost of the solar system. The money that is paid to Uncle Sam can be invested to add value to your home. The State of Utah offers twenty-five percent up to \$2000 in tax incentives for residential and ten percent up to \$50,000 for commercial. The Federal Government



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offers thirty percent up to \$2000 for residential and thirty percent with no cap for commercial. Now remember this is money you are either going to give the government or spend it on your home or business. This money comes off the top of what you owe not off the gross income.

In Nevada installing renewable energy you can take the cost of the system off of the value of the property forever more. We need something of that nature in Utah.

The value that it adds to your home is also a consideration. Although the National Appraisal Journal dictates that a solar energy system is worth \$20 for every \$1 in electricity savings it creates, local appraisers judge the value of solar panels based on sales

of comparable solar-equipped homes in the area instead of relying on the national standard.

The life of a solar panel is 40 years plus, warranty is 25 years. A conservative way to estimate the value is to take energy cost savings, times it by 10 years, less than half the warranty. There are no maintenance costs on net-metering systems.

Solar will gain a stronger foothold in the market place. Appraisers will soon be able to easily put a value to net-metering systems. Real estate agents are seeing that the people coming from California to buy in Southern Utah are asking for homes with solar already installed. This is a great sales advantage for the developers or home owners to invest! What is it worth to be able to sell that real estate more rapidly?

What if you put money in the bank and if you could get 4% interest on a 5 year CD? On a monthly basis the interest would be about seventy dollars. On a 2300 watt system you would offset your

electric bill by about thirty dollars, system performance may vary.

The interest made on the CD is taxed and the kilowatt hours saved on the power bill is not taxed. On a \$21,000 system you would get a minimum of \$4000 from the government in tax incentives that you are either going to give to them or spend on a solar system.

Also, add the first years saving of around \$360 and that is an instant 21% return in the first year. Now that's having your money work for you! This is at today's rates no inflation added.

Several utilities are also offering rebates. This would give a return of up to an additional nineteen (19) percent. St George is \$2 per watt up to 3000 watts residential and 10,000 watts commercial. Washington City is offering similar rebates. Rocky Mountain is offering \$2 per watt up to 3000 watts residential and 15,000 watts commercial. Rocky Mountain is limited to how many kilowatts they will pay on per year. Hurricane also offers a rebate.

Now, add all that together and you will see that a 2300 watt system price at \$21,000 could get you a return of 40% in the first year. What about the added value to the property? The savings of \$360 per year times 10 years and the added value to the property is \$3600 at the very minimum. This adds another 23% return on investment if you sell.

Being conservative energy inflation at 7% would be \$60. In ten years the savings would double. Keep in mind savings taxes on that energy consumed.

It is a good investment today and will only get better as the winds of change gain momentum. The actual cost of a 2300 watt system can be as low as \$12,600. Return per year can be as much as 3% and another 31% of 12,600.00 if you should sell. That could be a payback of as little as 16 years. Commercial could be 8 years or less with the better tax incentive and rebates. It's ok to be a spend thrift, indulge!